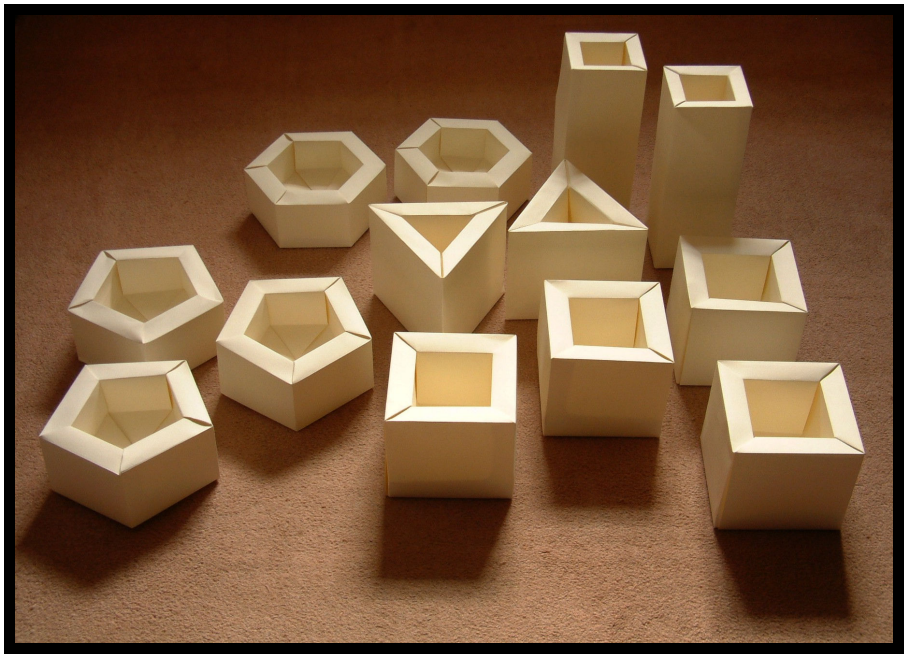
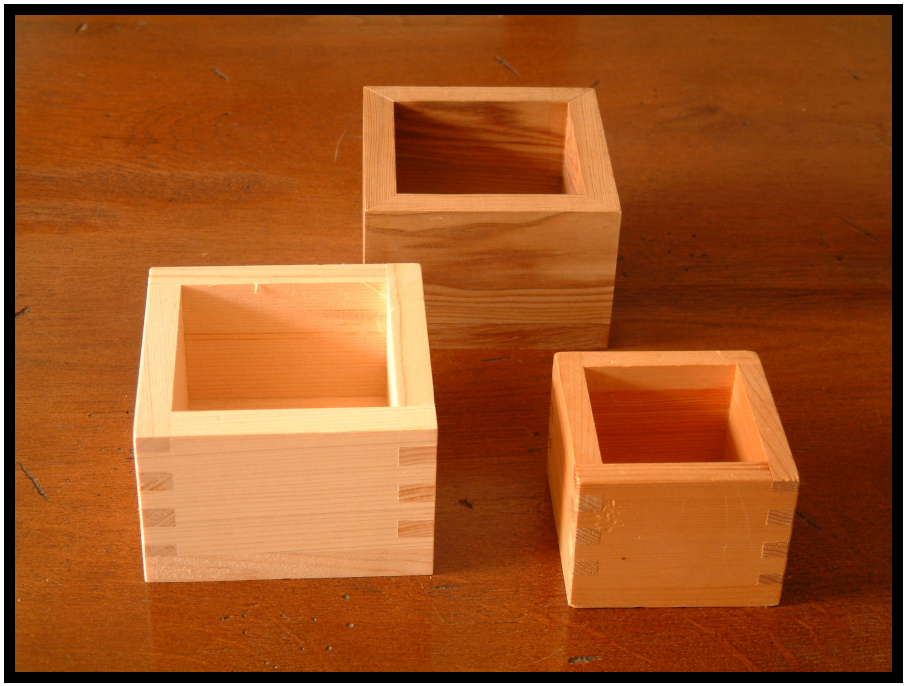
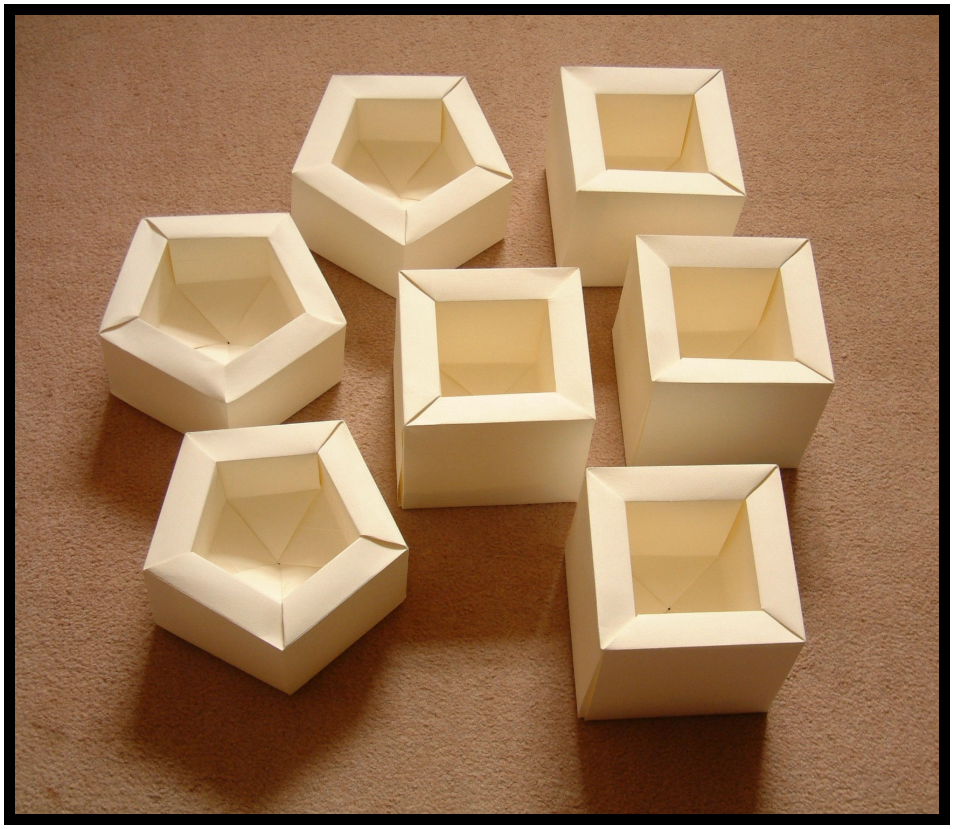




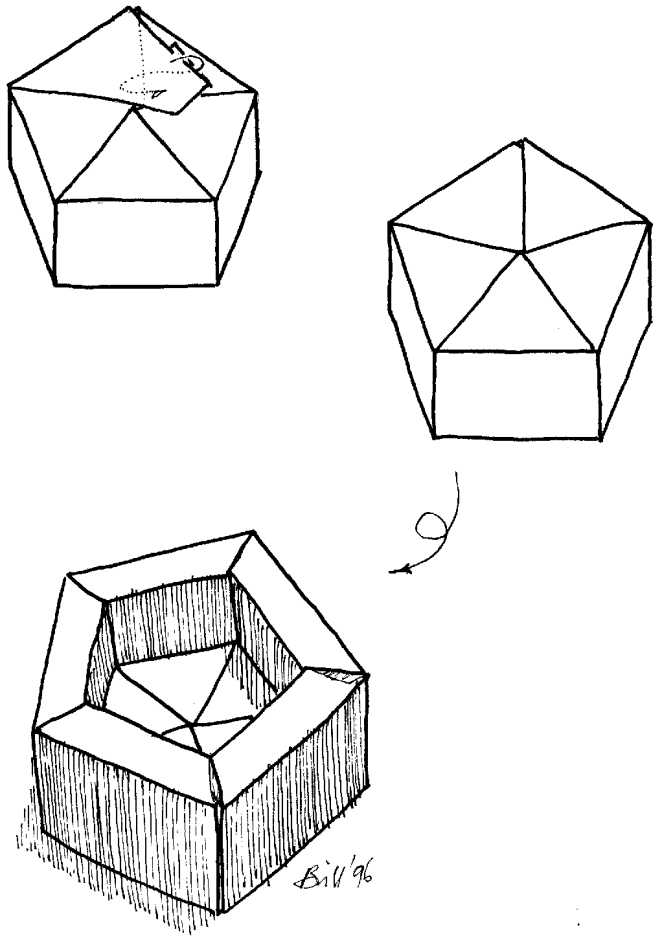


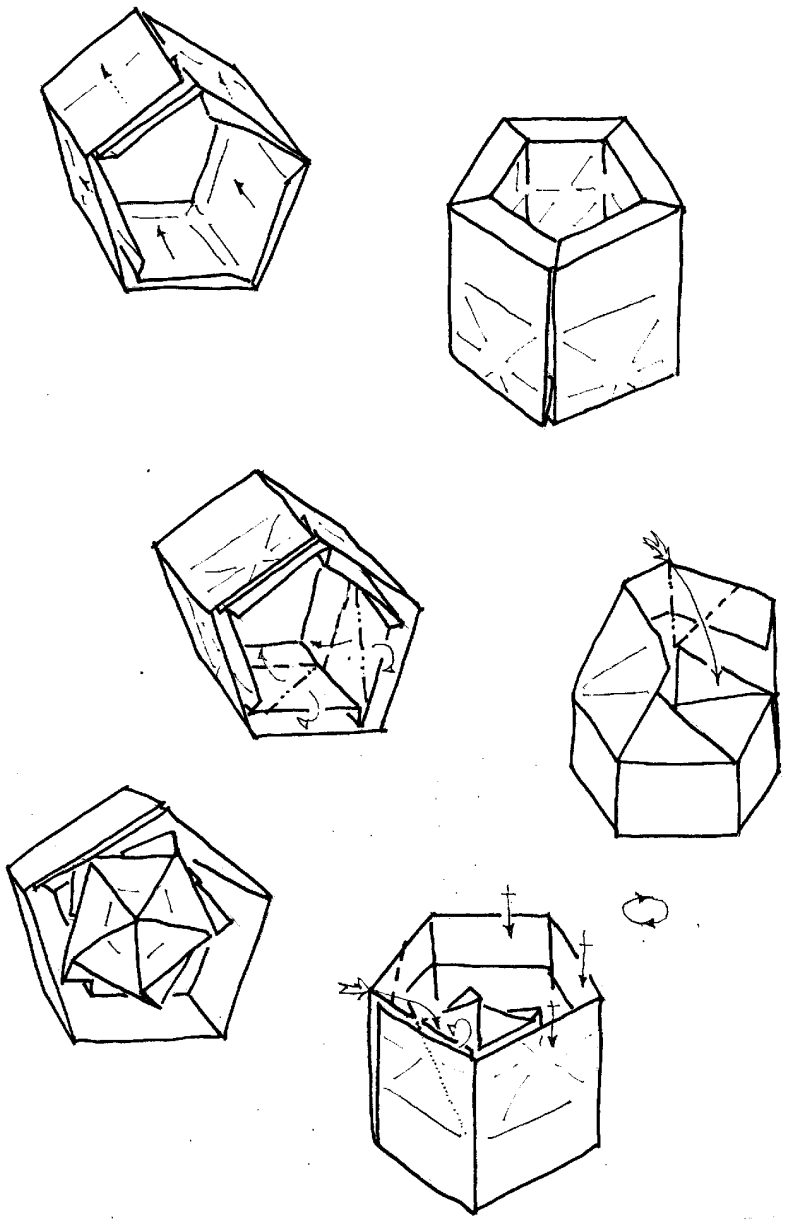
Origami Masu

by

Dave Brill

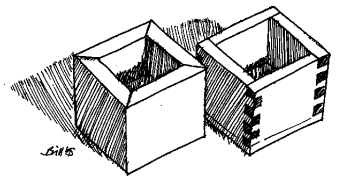
Origami Masu





Origami Masu

Dave Brill



Contents

Introduction

What's a masu? It's a small Japanese wooden box used in former times for measuring rice or beans. It's now more frequently used as a cup for drinking sake at weddings or in restaurants and bars .

As a subject for an origami design, it's not new: the classic origami box made from a blintzed square is a simple fold popular with beginners and experts alike.

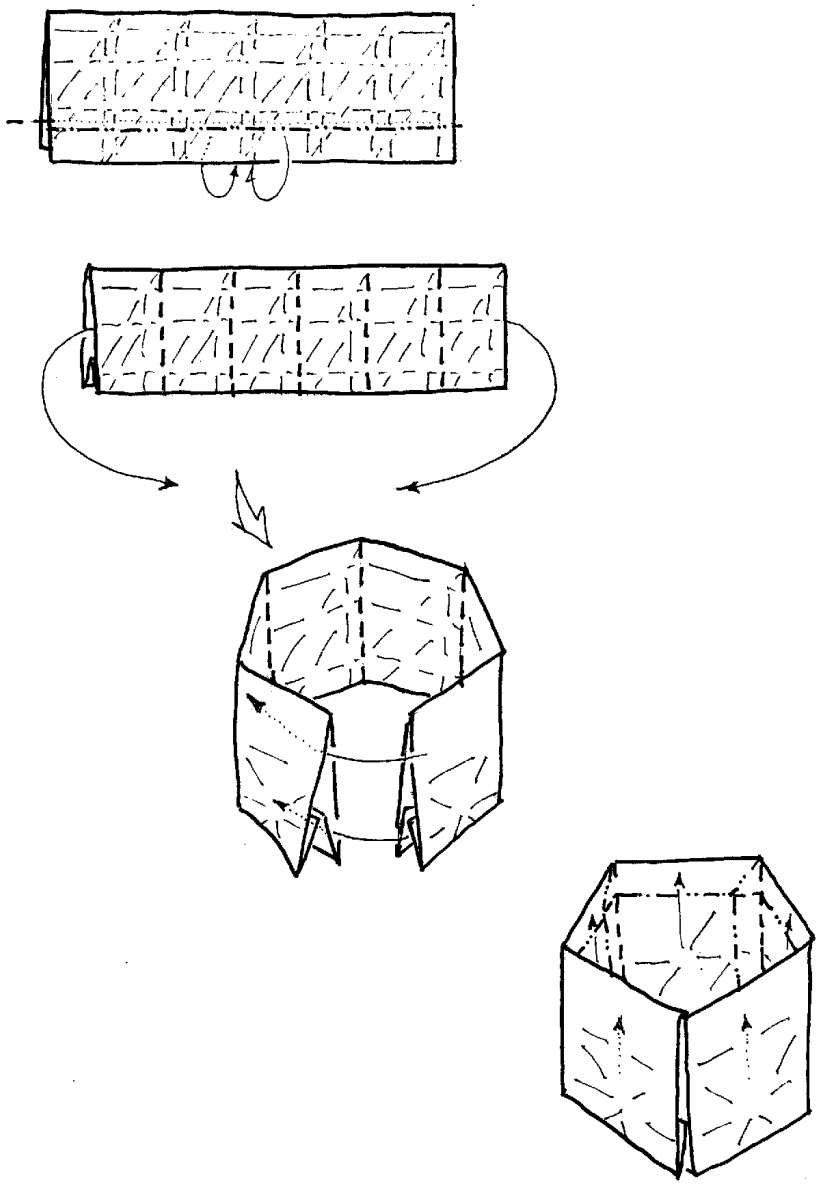
I first saw a real wooden masu in Kyoto in 1993, when I was struck by the beauty of the simple box shape, the warmth of the wood, the elegant proportions and the precision of the joints. It wasn't until after my return to England, while cursing myself for not having bought one, that I resolved to try and design an origami version. My aim was to reproduce the depth of the walls with an inner layer, at the same time attempting to imitate the masu's simplicity and completeness of form.

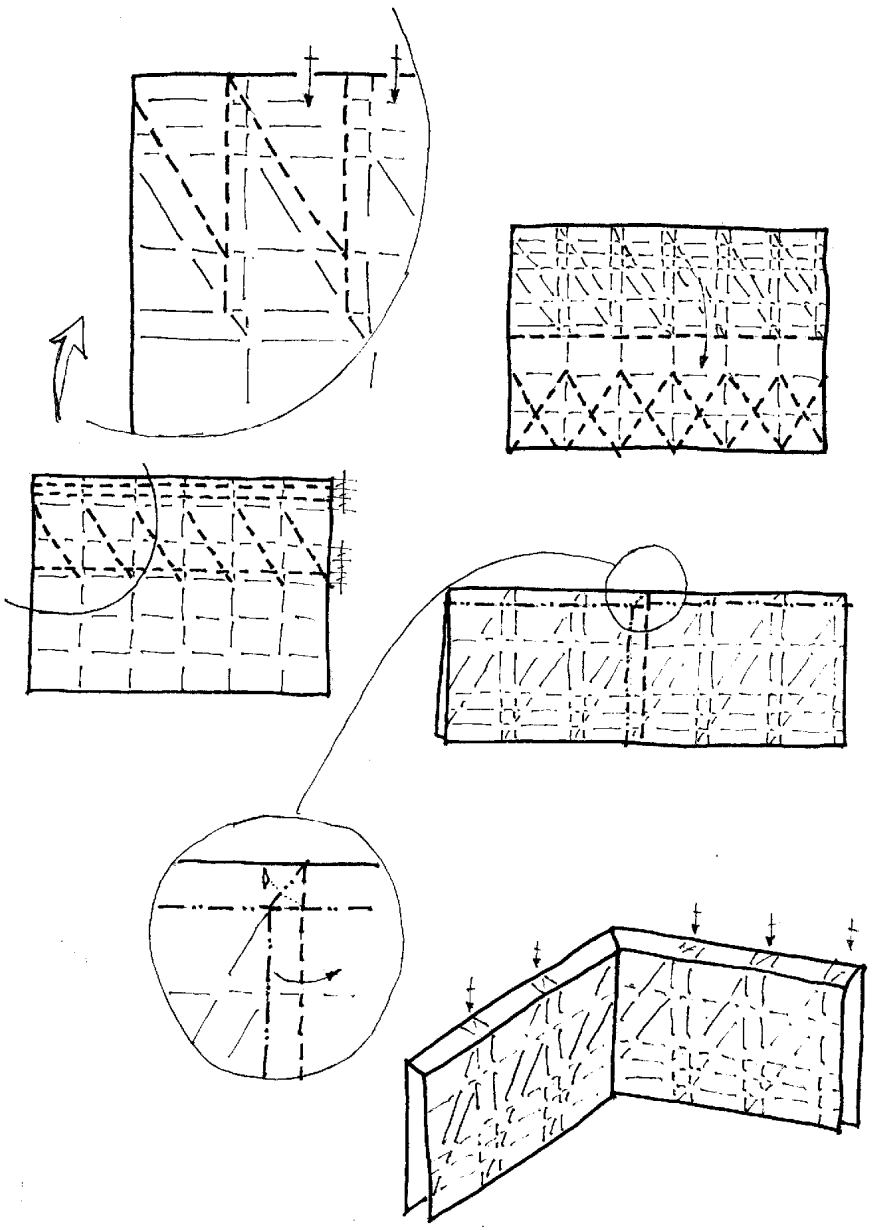
Working from memory, I found that an A4 rectangle gave me the required structure: I borrowed folding ideas from Shuzo Fujimoto on the way, namely the iterative division into five equal parts, the twist lock which forms the base of the inner layer, and the final rotating lock on the outside which pays tribute to Fujimoto's masterful cube.

On a return visit to Kyoto, I did buy three masu of different sizes, and I was delighted to find that my origami version matched almost exactly the dimensions of the middle-sized one!

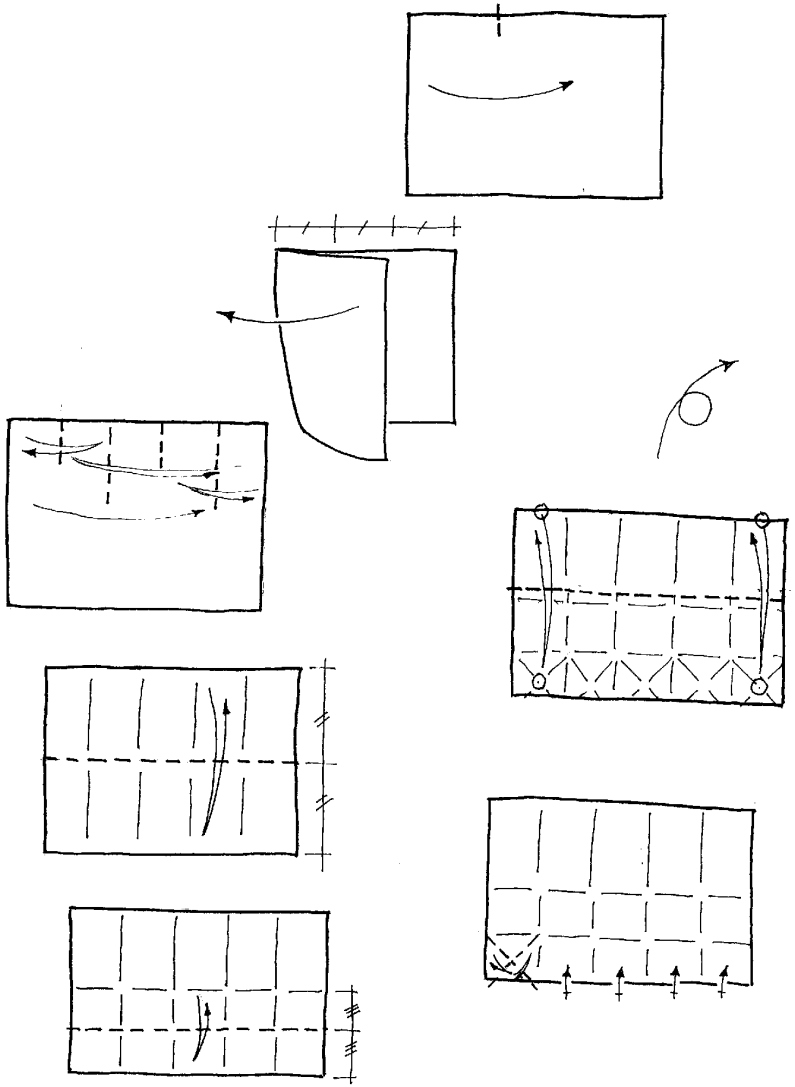
Make a Fujimoto cube from a 15 cm square, and you'll find it fits perfectly into the A4 square masu.

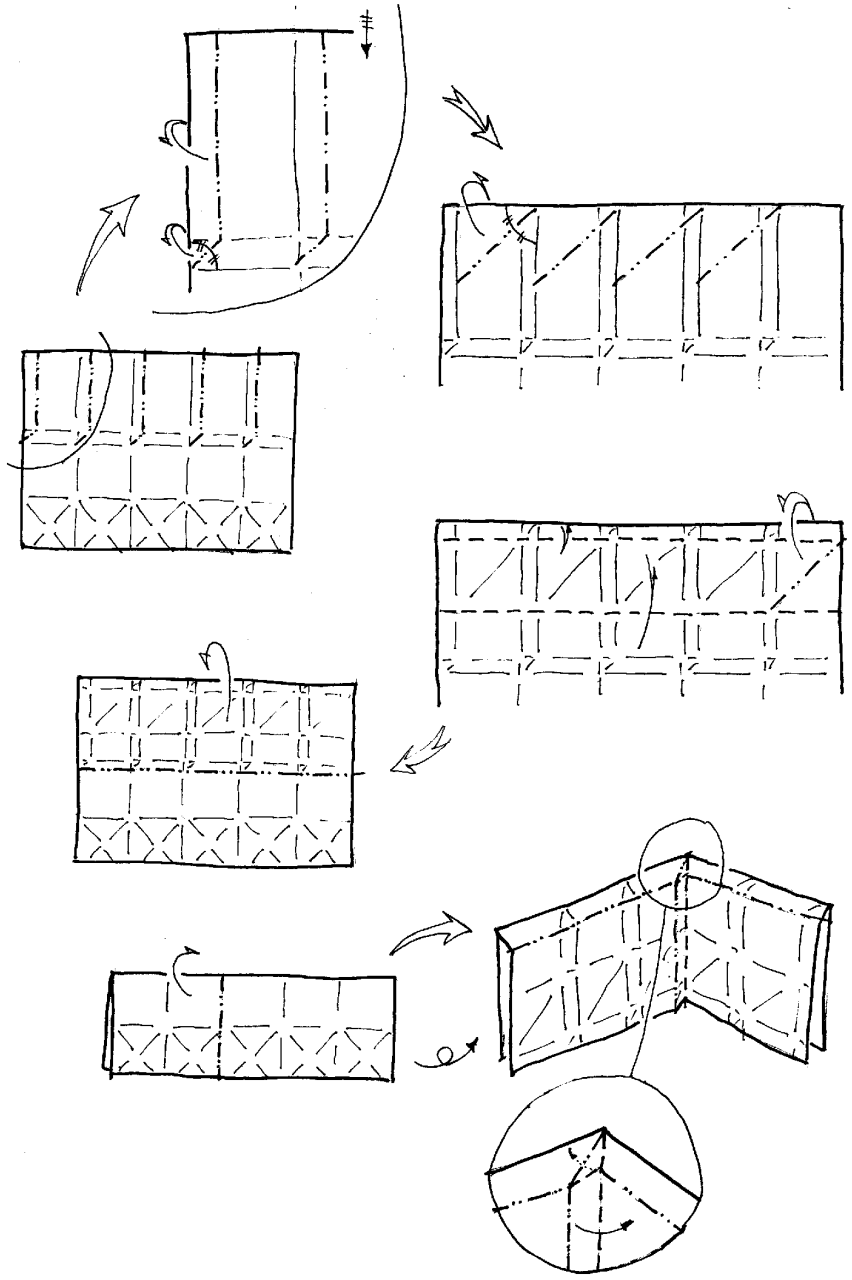
Dave Brill
Poynton
October 2002



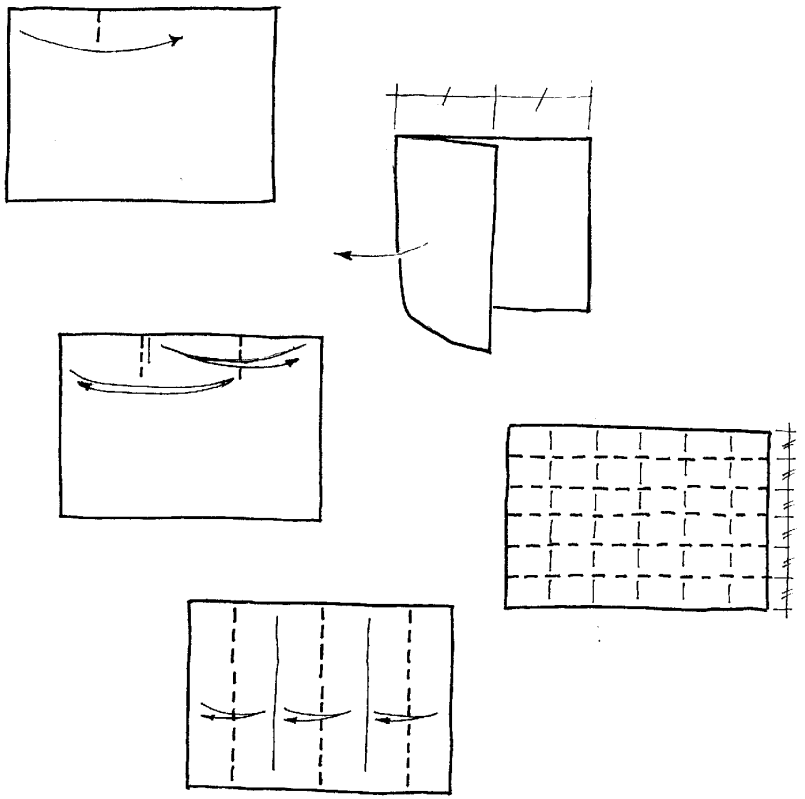


Square Masu





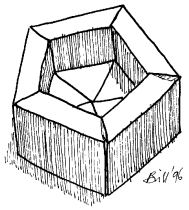
Pentagonal Masu

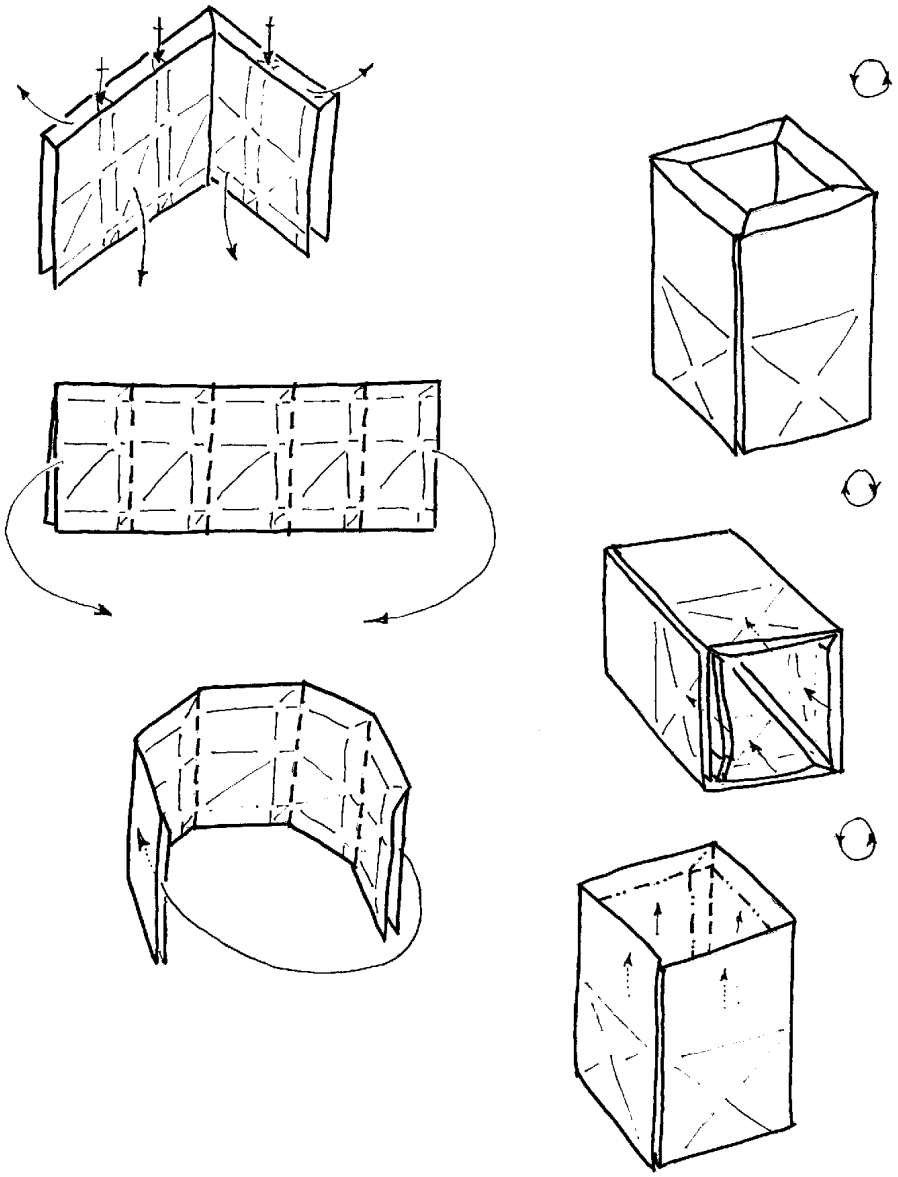


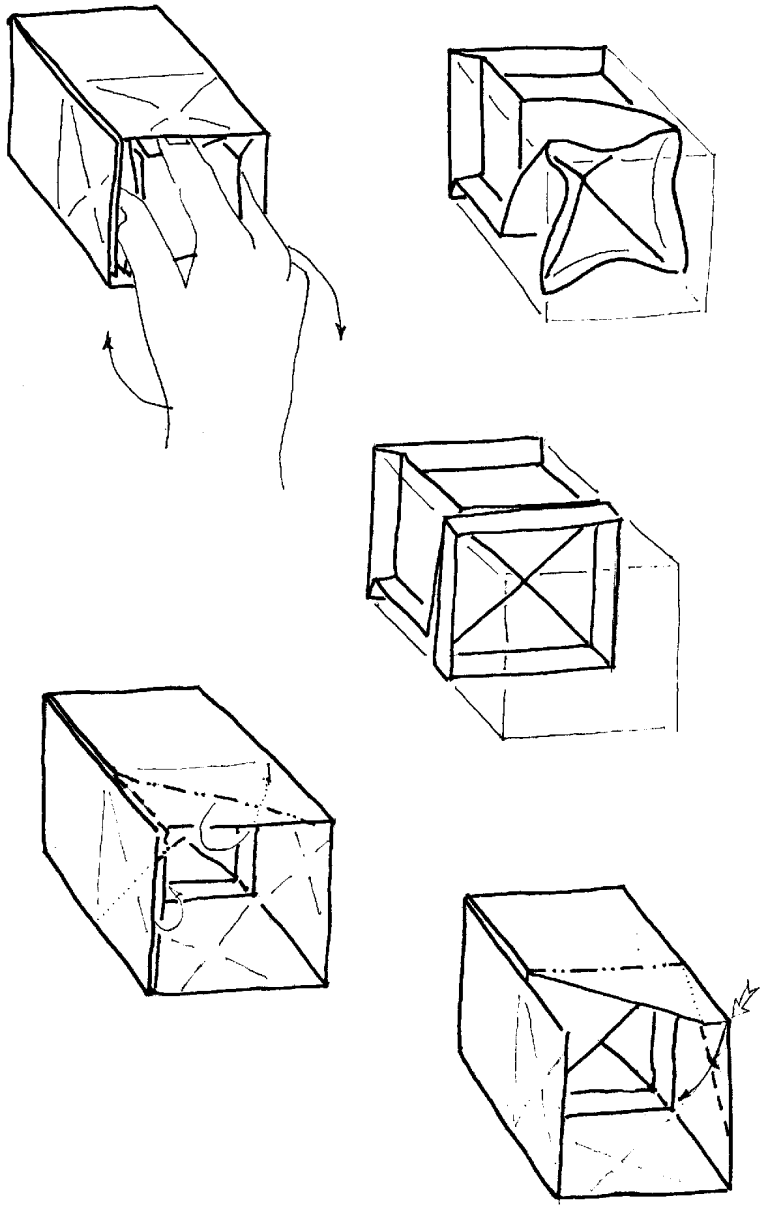
The pentagonal variation

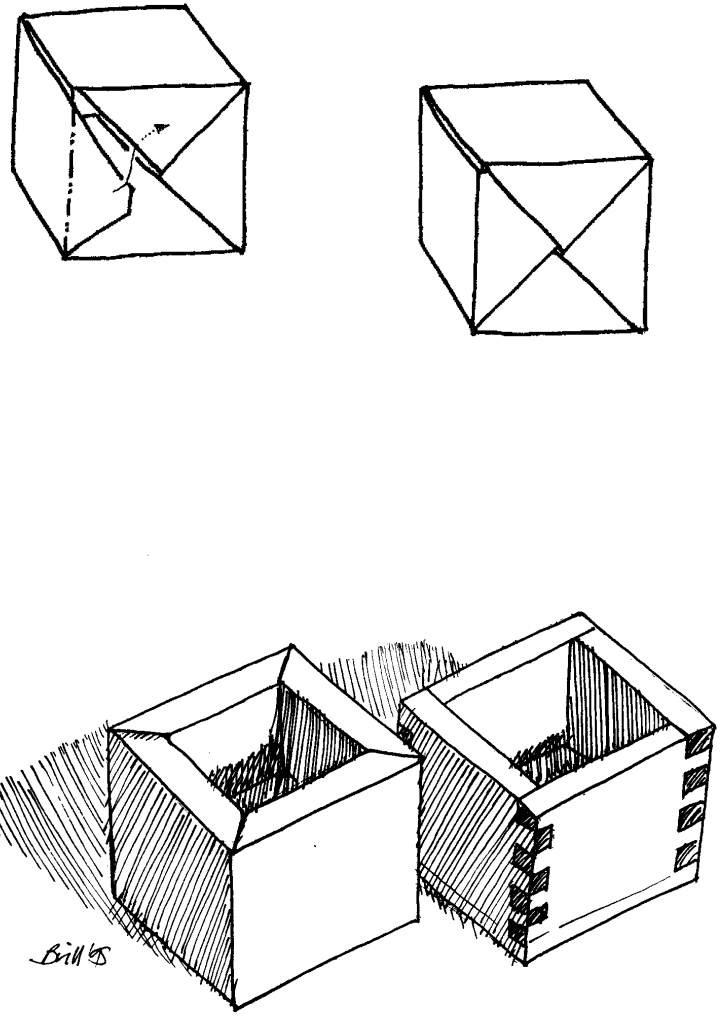
The pentagonal masu does not really exist outside origami, but having achieved a reasonable square result from an A4 rectangle, I soon had the idea that I could make use of the approximate pentagonal geometry of the A4 rectangle. I had dabbled with this concept before, producing a dodecahedron and various other modular constructions.

The following design is the result. Whereas it is possible to make the square masu from a rectangle other than an A4 (providing it is of *roughly* the same proportion!), you must use an A4 for the pentagonal masu in order to take advantage of the necessary, albeit approximate, hidden pentagonal geometries within.








Bill '05